




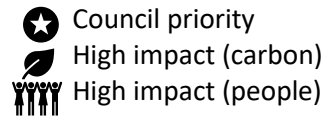







STAFF REPORT – MAY 2024 CLIMATE ACTION UPDATE TO COUNCIL




The actions are implemented across several Town departments. This report was produced by the Town’s Office of Sustainability and Resilience, with department support.



May 31, 2024



Buildings + Energy Actions		
Action	Benefits	Status / Target Date
1. Apply for Orange County Climate Action Grant to Upgrade Hargraves Outdoor Basketball Court to LED Lighting	If awarded, grant would improve outdoor lighting quality and provide the following lifetime benefits: <ul style="list-style-type: none"> • 140k kWh saved • 99.3 metric tons saved 	✓ August 18, 2023 (Sustainability) Project well-received but not awarded; Town encouraged to reapply next cycle
2. Participate in 2023 Solarize the Triangle Program	Program generated the following benefits in Chapel Hill from 2022-23: <ul style="list-style-type: none"> • 429 kW solar • 189 kWh battery • \$1.14M econ. devp. • 805, 217 lbs carbon saved  	✓ January 31, 2024
3. Partner with Central Pines to Submit EPA Climate Pollution Reduction Grant Priority Climate Action Plan	The Priority Climate Action Plan (PCAP) includes county-level GHG inventories, initial priority actions, and other information for the 8 county Central Pines planning area. This is the first step to a more comprehensive regional climate action plan (due fall 2025).	✓ March 1, 2024 (Sustainability)

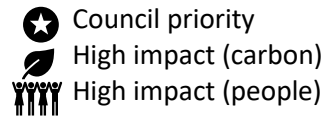







Action	Benefits	Status / Target Date
4. Upgrade to LED Lighting at Public Works Fleet and Field Operations Buildings	Project numbers and estimated savings: <ul style="list-style-type: none"> • 340 lights upgraded • \$3,325 saved yearly • 316 MTCO2e saved over life of project 	✓ March 29, 2024 (Sustainability)
5. Partner with Central Pines to Support NC DEQ's \$199.9M Climate Pollution Reduction Grant Application	If awarded, will provide several competitive grant opportunities for GHG reduction and up to \$15.4M to Central Pines for building efficiency and transportation programs that benefit Chapel Hill and our region  	✓ April 1, 2024 (Sustainability) State expects to hear from EPA by summer
6. Conduct Sustainable Town Facilities Assessment (solar, battery storage, EV charging, rainwater capture)	Identifies investment opportunities to make Town facilities more sustainable and resilient; positions the Town well for federal Climate Pollution Reduction Grant and other opportunities 	RFQ released in May FY25, Q3 (orig. FY24, Q2)
7. Through Solarize the Triangle, Install Rooftop Solar on 5 Affordable Housing Partner Homes	Installs approximately 4 kW of solar on up to 5 income-eligible properties identified through our affordable housing partners 	Finalizing list of actionable projects with Central Pines and housing partners FY25, Q2 (orig. FY24, Q4)
8. Begin Piloting Weatherization Gap Program	Enhances weatherization work within Community Development Block Grant housing rehabilitation program and provides key operational insights for possible program expansion 	Project put on hold to align with Central Pines' building efficiency program through EPA Climate Pollution Reduction Grant (item 5 above) Target date: TBD









-  Council priority
-  High impact (carbon)
-  High impact (people)

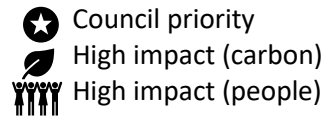
Action	Benefits	Status / Target Date
9. Scope Orange County Solar Farm Partnership 	Identifies the costs/benefits/options of a countywide partnership to build a utility-scale solar farm that helps meet municipal renewable energy goals 	Sustainability staff coordinating with Advanced Energy and municipal partners to scope solar opportunity FY24, Q4 (orig. Q3)

Transportation + Land Use		
Action	Benefits	Status / Target Date
1. Place Order for up to 7 Additional Electric Transit Buses	Reduces fleet emissions and provides operational insights into fleet electrification 	✓ January 2024 (Transit) Delivery expected in 12-16 months
2. Take Delivery of 7 Additional Electric Transit Buses	Each electric bus reduces fleet emissions by 40%, for a total emissions reduction of 360 metric tons per year; the fleet now has 11 total EV buses 	✓ January 2024 (Transit) Buses received and in operation
3. Develop Fleet Electrification Purchasing Plan	Prepares Town for continued transition to EVs and EV infrastructure through the annual vehicle replacement cycle and other investments	✓ January 2024 (Public Works & Sustainability)
4. Purchase 2-5 More Electric Fleet Vehicles in FY24	Five EVs were purchased and the replacements produced 53% or lower carbon emissions and save about 8.3 metric tons per year	✓ January 2024 (Public Works & Sustainability)



Action	Benefits	Status / Target Date
5. Develop Conditional Zoning Climate Action Worksheet for Applicants	Provides zoning applicants with guidance on how to develop a project-specific climate action plan that follows the Council’s updated policy for new development 	✓ February 12, 2024 (Planning & Sustainability)
6. Apply for Energy Efficiency and Conservation Block Grant (EECBG) for E-Bikeshare Program	If approved, grant would provide \$129,010 from the Department of Energy to support an e-bikeshare pilot program for residents and staff 	✓ May 14, 2024 (Sustainability) Town expects to hear from the Department of Energy by June
7. Complete Feasibility Study of the Everywhere-to-Everywhere Greenway Network	Enables future projects that reduce emissions by providing transportation options that don’t require a car 	Office of Mobility and Greenways finalizing contract documents FY25
8. Begin Piloting New Wayfinding Strategy	Supports build-out of Town-wide Mobility Plan and reduces emissions by increasing use of existing trails, paths, bike lanes	Office of Mobility and Greenways and Sustainability finalizing options for pilot; project timing now in sync with Downtown wayfinding study FY25, Q4 (orig. FY24, Q4)
9. Design Bolin Creek Greenway Extension (Umstead to Estes Ext.)	Reduces emissions by providing more transportation options that don’t require a car 	Office of Mobility and Greenways starting design June 2024 FY25
10. Design Estes Drive Extension (MLK to Carrboro)	Reduces emissions by providing more transportation options that don’t require a car 	Office of Mobility and Greenways signing contract, kicking off project summer 2024 FY25




Action	Benefits	Status / Target Date
11. Design and Construction of Cameron Ave Protected Bike Lanes	Reduces emissions by providing more transportation options that don't require a car 	Office of Mobility and Greenways signing contract, kicking off project summer 2024 FY25
12. Design of Campus-to-Campus Greenway	Reduces emissions by providing more transportation options that don't require a car 	Office of Mobility and Greenways to prepare bid for design FY25
13. Install 20 EV Charging Stations at New Rosemary Parking Deck 	Enables EV charging and reduces vehicle emissions by displacing gasoline (projected benefits TBD) 	Sustainability staff coordinating installation by July FY25, Q1 (orig. FY24, Q4)
14. Streamline EV Charging Station Permitting Process in Collaboration with Planning and Inspections	Reduces permitting soft costs and enables faster deployment of public and private EV charging stations to support community-wide transition to electric vehicles 	Sustainability staff coordinating internal reviews FY25, Q1 (orig. FY24, Q3)
15. Work with NCDOT to Secure Funding for North-South BRT Project	Enables bus rapid transit project to move forward  	Transit waiting to hear from NCDOT about SPOT funding request FY24, Q4
16. Participate in TOD and LUMO Rewrite Visioning	Provides Town with updated sustainable development and redevelopment practices (projected benefits TBD) 	Sustainability and Planning staff coordinating with consultants on sustainable development practices that support Town's Climate Action Plan Ongoing



Action	Benefits	Status / Target Date
17. Begin Piloting Landscaping Crew with All-Electric Equipment	Reduces emissions from landscaping activities and provides operational insights into landscape equipment electrification	Parks & Rec staff taking delivery of equipment orders, and vendor reporting delays FY25, Q1 (orig. FY24, Q3)
18. Begin Piloting EV Refuse Vehicle	Reduces emissions from vehicle and provides operational insights into heavy duty vehicle electrification and fast charging infrastructure	Public Works taking delivery of vehicle in August; Sustainability coordinating charger installation now FY25, Q1 (orig. FY24, Q4)




Water, Wastewater & Natural Resources





Action	Benefits	Status / Target Date
1. Review of Town Stormwater Regulations ★	Informs Council policy on sustainable stormwater infrastructure and regulations	✓ May 1, 2024 (Public Works) 100-year regulation approved; other recommendations will follow with LUMO Rewrite
2. Pilot Enhanced Composting and Recycling at Town Hall and Fire Station #1	Reduces waste and provides operational insights into waste reduction programming; project split into 2 phases	Sustainability staff now completing phase 2 by adding composting bins and recycling options FY25, Q1 (phase 2) (✓ Phase 1 FY24, Q2)
3. Participate in Countywide Solid Waste Master Planning ★	Prepares Orange County to meet zero waste operations goal by 2045	Plan being revised based on Orange Co. BOCC feedback; draft to be shared at next SWAG quarterly meeting FY25, Q2 (orig. FY23, Q4)

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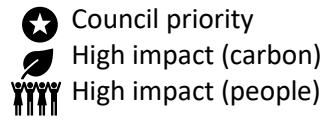
Action	Benefits	Status / Target Date
4. Implement Approved Recommendations for Lower Creek Working Group	Mitigates stormwater flooding through targeted infrastructure investments	Town staff are working on a response plan FY24, Q4

Resiliency		
Action	Benefits	Status / Target Date
1. Conduct "Lights Out for Birds" Outreach	Supports biodiversity by helping community members ensure safe passage for birds during the fall migration	✓ October 12, 2023 (Sustainability & Comms)
2. Apply to Department of Energy Planning Grant to Expand Town Resilience Hubs (Central Pines Supported)	If awarded, grant will help (1) identify climate impacts through community partner/resident engagement, and (2) assess the potential for energy upgrades to Town community centers 	✓ Nov 10, 2023 (Sustainability, Emergency Mgmt, Parks & Library) \$500k planning grant awarded to Central Pines (see grants section below)
3. Launch Year 3 of Leave Your Leaves Campaign 	Creates fertile soil and healthy trees, supports local wildlife, reduces flooding and improves water quality, and reduces emissions; and Year 3 highlights include: <ul style="list-style-type: none"> • 165 new pledges (3x our annual goal) • Carrboro's participation 	✓ December 31, 2023 (Sustainability & Public Works)

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Action	Benefits	Status / Target Date
4. Plant Trees in Historically Underserved Neighborhoods	Worked with residents and Public Housing to plant 40 trees in Northside and Pine Knolls, with a year of tree care support; funding provided by Orange County Climate Action Grant 	✓ February 26, 2024 (Sustainability & Parks)
5. Expand Flood Alert System Sensor Technology 	Enhances early warning system for low-lying areas of Town 	Sustainability, Public Works, Technology Solutions staff selecting vendor and equipment FY24, Q1 (orig. FY24, Q4)
6. Evaluate Performance of Booker Creek Basin Park 	Provides operational insights about the effectiveness of this stormwater infrastructure project	Public Works has selected a vendor to provide performance data; study will take 12 months FY25, Q4 (orig. FY24, Q4)

Grants Management				
Grant	Grantor	Amount	Match	Status
1. Plant Trees in Historically Underserved Communities	Orange County Community Climate Action Grant Program	\$40,000	TBD	✓ Completed: February 26, 2024
2. Install 10 EV Charging Stations at the Rosemary Parking Deck	NCDEQ, VW Settlement Program	\$25,000	TBD	Awarded and active Estimated Completion: FY25, Q1 Reporting: Quarterly



Grant	Grantor	Amount	Match	Status
3. EV Refuse Truck and Fast Charger	NCDEQ, Diesel Emissions Reduction Act (DERA)	\$297,400	\$313,498	Awarded and active Estimated Completion: FY25, Q1 Reporting: Quarterly
4. EV Refuse Truck and Fast Charger	Orange County Community Climate Action Grant Program	\$50,000	N/A	Awarded and active Estimated Completion: FY25, Q1 Reporting: Quarterly
5. Energy Efficiency and Conservation Block Grant Formula Allocation	US Department of Energy, EECBG Program	\$129,010	N/A	Awarded Estimated Completion: FY26 Reporting: TBD
6. Regional Resilience Hub Planning (Central Pines)	US Department of Energy, Energy Future Grants Program	\$88,235 (\$500k across 3 counties)	N/A	Awarded Estimated Completion: TBD Reporting: TBD
		\$629,645	\$313,498	